# A NEW SPECIES OF CYNOGLOSSUM (BORAGINACEAE) FROM OAXACA, MEXICO

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## ABSTRACT

Cynoglossum hintoniorum B.L. Turner, spec. nov., is described and illustrated from high elevational regions on and about Cerro Quiexobra, Oaxaca. It is closely related to C. amabile, but differs markedly from that species in possessing mericarps with relatively few smooth elongate spines, otherwise they appear very similar.

KEY WORDS: Boraginaceae, Cynoglossum, México, Oaxaca, systematics

Identifications of collections from Cerro Quiexobra, Oaxaca, and immediate environs has revealed the following novelty.

CYNOGLOSSUM HINTONIORUM B.L. Turner, spec. nov. TYPE: MEXICO. Oaxaca: Distrito Miahuatlán, Cerro Quiexobra, 3145 m, 19 Oct 1995, Hinton et al. 26206 (HOLOTYPE: TEX).

Similis C. amabili Stapf & Drumm. sed mericarpiis cum solum 10-15 spinis elongatis laevibusque (vice spinarum multarum, brevium, et muricatarum).

Erect perennial herbs 20-60 cm high, arising from stout ligneous taproots. Basal leaves mostly 10-18 cm long, 1.5-3.0 cm wide; petioles 3-6 cm long; blades narrowly elliptic, widest at or near the middle, pinnately veined, moderately pilose above and below, strigose along the major veins, the surfaces minutely atomiferous-glandular, the margins entire. Midstem leaves 5-10 cm long, 1-3 cm wide, the petioles winged throughout, tapered upon by the blades. Flowers terminal, arranged in scorpioid-racemic inflorescences 10-20 cm long, the pedicels 2-5 mm long, recurved in fruit. Sepals ovate-lanceolate, ca. 3 mm long, strigose externally, free to the base or nearly so. Corollas blue, 8-10 mm across, the throat nearly closed by hispidulous bilobate appendages. Stamens 5, nearly sessile, the anthers ca. 1 mm long, not excurrent.

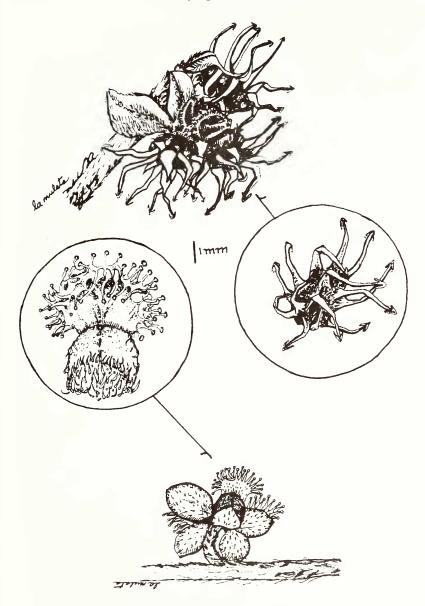


Figure 1. Mericarps of *Cynoglossum amabile* (lower left, *Webster 11327* [TEX]) and *C. hintoniorum* (upper right, from holotype).

Style ca. 3 mm long, the stigmatic surface more or less peltate. Mericarps (3 of them), each with 10-15 long flattened smooth spines, 3-4 mm long, their apices with 2-4 hooked hairs, 1 of the mericarps tending to abort, nearly rugose, not at all spinose or very weakly so.

ADDITIONAL SPECIMEN EXAMINED: MEXICO. Oaxaca: Distrito Miahuatlán, Xianaguilla, 2715 m, oak and pine forest, 13 Oct 1995, *Hinton et al.* 26063 (TEX).

This taxon has most of the characters of *Cynoglossum anabile* Stapf & Drumm., except for the markedly different fruits, as shown in Figure 1. Examination of 30 or more sheets of *C. amabile* (LL, TEX) from both México and Central America revealed no fruits remotely approaching those of *C. hintoniorum*.

Mexico is now known to have four species of Cynoglossum: C. amabile, C. henricksonii Higgins (=C. erectum Higgins 1976, not C. erectum Sweigg ex Schrank 1822), C. hintoniorum, and C. pringlei Greenm. Cynoglossum anabile is said to be native to China, being introduced into México and elsewhere in Central and South America (cf. Nash & Moreno 1981, who provided an excellent illustration). Brand (1921), however, does not note a New World distribution in his treatment. Apparently C. amabile is used as a folk medicinal, having largely spread throughout the tropical and subtropical regions of the New World over the past 50 years (it was not described as new to science until 1906). Gibson (1970) thought the plant to be largely cultivated for ornamental purposes in Guatemala, the very adherent seeds readily dispersed by mammals, including man. Finally, it should be noted that C. hintoniorum may be a stabilized or populational fruit-form of C. amabile; if so, it is a remarkable populational variant, especially since it occurs at two distant locales in Miahuatlán at very high elevations (2715-3145 m) in regions relatively remote from human population centers.

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